

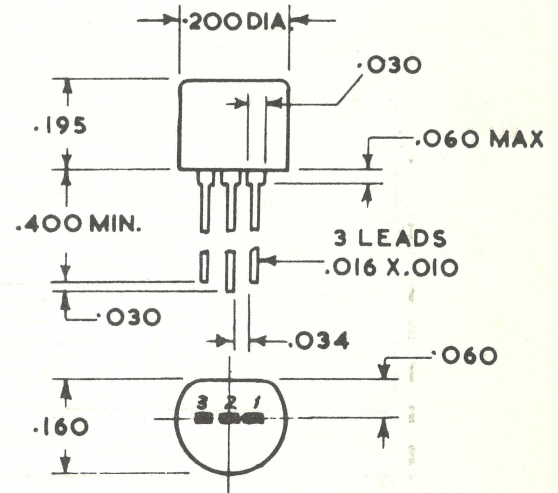


AMALGAMATED WIRELESS VALVE CO. PTY. LTD.

note Equivalent to:
AS148 BC108 : BC148
AS149 BC109 : BC149

The AS148 and AS149 are n-p-n silicon planar epitaxial transistors for general purpose use in audio and switching circuits. The AS149 is a low-noise high gain unit. These units are in epoxy packages.

DIMENSIONAL OUTLINE

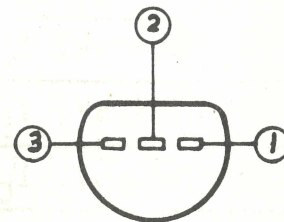


Dimensions in Inches

ABSOLUTE MAXIMUM RATINGS

Collector-base voltage	=	20 volts
Collector-emitter voltage	=	20 volts
Emitter-base voltage	=	5 volts
Emitter current	=	100mA

TERMINAL DIAGRAM



Lead 1-Emitter
Lead 2-Base
Lead 3-Collector

THERMAL RATINGS

Dissipation in an ambient temperature up to 25°C ----- 300mW max.
Derate linearly to zero at 135°C.

During soldering lead temperature must not exceed 255°C for
10 secs. max. within 1/16" of can.

Storage temperature -25°C to 135°C.

31.10.67

CHARACTERISTICS AT 25°C

AS148

AS149

PARAMETER	CONDITIONS	MIN.	TYP.	MAX.	UNITS
I_{CB0}	$V_{CB} = 20V$			15	nA
I_{EB0}	$V_{EB} = 5V$			100	μA
V_{EBF}	$V_{CB} = 20V$			1	V
V_{CEO}	$I_C = 2mA$	20			V
$V_{CE(sat.)}$	$I_C = 10mA, I_B = 1mA$.25	V
f_T	$V_{CE} = 5V, I_C = 0.5mA$		85		MHz
f_T	$V_{CE} = 5V, I_C = 10mA$		300		MHz
$C_{b'c}$	$V_{CB} = 5V, I_E = 0$		2.5		pF
	AS148				
I_B	$V_{CE} = 5V, I_E = 10\mu A$		85	250	nA
I_B	$V_{CE} = 5V, I_E = 2mA$		10	18.5	μA
	AS149				
I_B	$V_{CE} = 5V, I_E = 10\mu A$			100	nA
I_B	$V_{CE} = 5V, I_E = 2mA$			9.6	μA
NF	$V_{CE} = 5V, I_C = 0.2mA$				
	$\Delta f = 30Hz - 15kHz, R_s = 2K\Omega$			4	dB

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